

6. The computer-implemented method of claim 1, wherein generating a recommended subrogation resolution using a machine learning algorithm further comprises:

comparing, at the one or more processors, damages data and services rendered data to a historical dataset for damages data and services rendered data; and
identifying, at the one or more processors, similarities and differences between the datasets.

7. (canceled)

8. The computer-implemented method of claim 1, further comprising:

adding, at the one or more processors, the transaction to a block of transactions;
solving, at the one or more processors, a cryptographic puzzle based upon the block of transactions;
adding, at the one or more processors, the solution to the cryptographic puzzle to the block of transactions; and
transmitting, at the one or more processors, the block of transactions to at least one other participant in the distributed ledger network.

9. A computer-implemented method for interacting with a distributed ledger maintained by a plurality of participants, the method comprising:

receiving, at the one or more processors, a transaction related to a subrogation claim;
analyzing, at the one or more processors, the transaction related to the subrogation claim;
generating, at the one or more processors, a recommended subrogation resolution based upon the analysis of the transaction and using a machine learning algorithm including determining a subrogation amount for an at-fault insurer, and a not-at-fault insurer;
transmitting, at the one or more processors, a transaction including the recommended subrogation resolution to a smart contract stored on the distributed ledger; and
identifying a subrogation claimant with a first cryptographic public key, and identifying a subrogation defendant with a second cryptographic public key; and, subsequently, sending data including a message signed by private keys corresponding to the first and second public keys identifying the subrogation claimant and the subrogation defendant in the smart contract.

10. The computer-implemented method of claim 9, wherein analyzing the transaction related to the subrogation claim further comprises:

analyzing, at the one or more processors, damages data contained in the transaction; and
analyzing, at the one or more processors, services rendered data contained in the transaction.

11. The computer-implemented method of claim 9, wherein generating a recommended subrogation resolution using a machine learning algorithm further comprises:

executing, at the one or more processors, a machine learning algorithm using damages data and services rendered data included in the transaction.

12. The computer-implemented method of claim 9, wherein generating a recommended subrogation resolution using a machine learning algorithm further comprises:

comparing, at the one or more processors, damages data and services rendered data to a historical dataset for damages data and services rendered data; and
identifying, at the one or more processors, similarities and differences between the datasets.

13. (canceled)

14. A computer system for interacting with a distributed ledger, the system comprising:

a network interface configured to interface with a processor;

a memory configured to store non-transitory computer executable instructions and configured to interface with the processor; and

the processor configured to interface with the memory, wherein the processor is configured to execute the non-transitory computer executable instructions to cause the processor to:

monitor transactions on the distributed ledger;
identify a transaction related to a subrogation claim;
analyze the transaction related to the subrogation claim;
generate a recommended subrogation resolution using a machine learning algorithm including determining a subrogation amount for an at-fault insurer, and a not-at-fault insurer;

transmit a transaction including the recommended subrogation resolution to a smart contract stored on the distributed ledger; and

identify a subrogation claimant with a first cryptographic public key, and identify a subrogation defendant with a second cryptographic public key; and, subsequently, send data including a message signed by private keys corresponding to the first and second public keys identifying the subrogation claimant and the subrogation defendant in the smart contract.

15. The computer system of claim 14, wherein to monitor transactions on the distributed ledger, the processor is further configured to execute the non-transitory computer executable instructions to cause the processor to:

monitor a smart contract stored at an address on the distributed ledger.

16. The computer system of claim 14, wherein to identify a transaction related to a subrogation claim, the processor is further configured to execute the non-transitory computer executable instructions to cause the processor to:

identify a subrogation ID in a transaction; and
validate the subrogation ID.

17. The computer system of claim 14, wherein to analyze the transaction related to the subrogation claim, the processor is further configured to execute the non-transitory computer executable instructions to cause the processor to:

analyze damages data contained in the transaction; and
analyze services rendered data contained in the transaction.

18. (canceled)

19. The computer system of claim 14, wherein to generate a recommended subrogation resolution using a machine learning algorithm, the processor is further configured to execute the non-transitory computer executable instructions to cause the processor to:

compare the damages data and services rendered data to a historical dataset for damages data and services rendered data; and

identify similarities and differences between the datasets.

20. (canceled)

21. The computer-implemented method of claim 1, wherein the claimant and defendant generate the public and private keys offline, and only the public keys are provided to other network participants.